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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## **Patent Application**

Applicant(s): Levent Sasmazel

Case: 501008-A-01-US (Sasmazel)

Serial No.: 10/043,589

Filing Date: January 10, 2002

Group: 2134

Examiner: Andrew L. Nalven

Title: Method and Apparatus for Secure Internet Protocol

Communication in a Call Processing System

## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicant hereby requests review of the final rejection in the above-identified application. A Notice of Appeal is filed concurrently herewith. The review is requested for the reason(s) stated in the Remarks section below.

## REMARKS

The present application was filed on January 10, 2002, with claims 1-25. Claims 1-25 remain pending. Claims 1, 2, 8, 13, 14, 20 and 25 are the independent claims.

Claims 1, 6, 7, 13, 18, 19 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0046534 (hereinafter "Alldredge") in view of U.S. Patent No. 6,148,404 (hereinafter "Yatsukawa").

Claims 2-5, 8, 9-12, 14-17 and 20-24 are allowed.

Applicant traverses the §103(a) rejection on the ground that the Alldredge and Yatsukawa references collectively fail to meet each and every limitation of claims 1, 6, 7, 13, 18, 19 and 25. Also, it is believed that insufficient objective evidence of motivation to combine the references has been identified.

In the previous response filed October 28, 2005, Applicant amended independent claims 1, 13 and 25 to clarify that a given end unit provides an interface between an associated plurality of terminals and a communication switch, and that the set of session key lists associated with the originating end unit comprises session key lists for respective terminals associated with that end unit. These independent claims further specify that the given set of session key lists is generated in the originating end unit and transmitted from the originating end unit to the communication switch in conjunction with an authentication protocol carried out between the originating end unit and the communication switch.

In formulating the §103(a) rejection, the Examiner acknowledges that Alldredge fails to meet the above limitations, but argues that the deficiencies of Alldredge are overcome by the teachings in column 5, line 57, to column 6, line 28, of Yatsukawa. See the Office Action at page 4, last two paragraphs, to page 5, first paragraph. The portions of the Yatsukawa reference relied upon by the Examiner are as follows:

FIG. 6 shows a sequence taken when the client A logs into a server B. The processing in FIG. 6 is divided into phases (2 and 3) for sharing a session key used for common-key enciphering (DES, IDEA and the like), and phases (4, 5 and 6) for performing authentication processing. The processing sequence is described below.

1 Client A sends a log-in request to server B.

- 2 Based on the log-in request, the server B sends the client A, a public key of the server B, random number and the like used for session-key sharing.
- 3 Client A generates a session key, enciphers the session key by using the public key of the server B and sends it to the server B. When the server B receives the enciphered session key, the session key is shared by the client A and server B. In the subsequent processing, all messages transferred between the client A and server B are enciphered by the session key and transmitted.
  - 4 Client A sends a public key and user name of the client A to the server B.
- 5 The server B verifies that the public key and user name of the client A are registered, generates challenge data (random number) for authentication, enciphers the challenge data by using A's public key and sends it to the client A.
- 6 Client A calculates a hash value of the challenge data, and sends the calculated value to the server B as challenge-response data.

7 The server B compares the value of the challenge-response data received in step 6 with a hash value of the stored challenge data directed to the client A, and if they are the same value, the log-in request is granted to the client A, while if they are different, the log-in request is rejected.

An advantage of the SSH scheme is in that since the challenge data changes each time, "masquerading" by a third person is impossible even if the third person steals a message in the processing sequence 6. However, there is a disadvantage in that, if an administrator of the server B changes the client A's public key with ill intention, the administrator can "masquerade" as the client A.

Applicant respectfully submits that the foregoing passage fails to supplement the deficiencies of Alldredge as applied to the independent claims. For example, it fails to teach or suggest the claimed generation of a set of session key lists in an originating end unit and transmission of the set of session key lists from the originating end unit to the communication switch in conjunction with an authentication protocol carried out between the originating end unit and the communication switch. In the above-cited passage from Yatsukawa, client A simply establishes a session key with server B and then participates in a challenge-response authentication protocol with that same server B. In an arrangement of this type, there does not appear to be any need whatsoever for generation or transmission of sets of session key lists between entities A and B.

It is therefore believed that the collective teachings of Alldredge and Yatsukawa fail to meet the limitations of claims 1, 13 and 25 as previously amended.

With regard to motivation to combine the references, the Federal Circuit has stated that when patentability turns on the question of obviousness, the obviousness determination "must be based on objective evidence of record" and that "this precedent has been reinforced in myriad decisions, and cannot be dispensed with." <u>In re Sang-Su Lee</u>, 277 F.3d 1338, 1343 (Fed. Cir. 2002).

Moreover, the Federal Circuit has stated that "conclusory statements" by an examiner fail to adequately address the factual question of motivation, which is material to patentability and cannot be resolved "on subjective belief and unknown authority." <u>Id</u>. at 1343-1344.

The purported objective evidence of motivation to combine, provided by the Examiner at page 4, last paragraph, to page 5, first paragraph, of the Office Action, appears to be conclusory in that it fails to indicate with sufficient specificity why or how one skilled in the art would combine Alldredge with Yatsukawa to reach the claimed invention. The Examiner relies primarily on the statement in column 6, lines 21-25, of Yatsukawa, which relates to the use of "challenge data" provided by server B to client A in the authentication protocol. However, the claimed invention relates to generation of a set of session key lists in an originating end unit and transmission of the set of session key lists from the originating end unit to the communication switch in conjunction with an authentication protocol carried out between the originating end unit and the communication switch. It is believed that the relied-upon portion of Yatsukawa relating to use of challenge data in a challenge-response authentication protocol between two entities fails to motivate the proposed combination with Alldredge.

Applicant also notes that the session key referred to in Yatsukawa is established for use between client A and server B. However, the claims indicate that the session keys recited therein are for respective terminals associated with an end unit, and not session keys established between the end unit itself and the communication switch. Yatsukawa would therefore seem to require that the recited originating end unit itself establish a session key with the communication switch, which is not what is claimed. Accordingly, the Yatsukawa disclosure actually seems to teach away from the claimed invention.

In view of the above, Applicant believes that claims 1-25 are in condition for allowance, and respectfully requests withdrawal of the §103(a) rejection.

Respectfully submitted,

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Date: May 8, 2006

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